

GENERAL TECHNICAL REVIEW COMMENTS

1. It is difficult to directly correlate sample locations with their intended purpose when cross-referencing the Nature and Extent Data Report (NEDR) with the Work Plan. A total of 13 potential source areas (PSAs) were identified in the Work Plan (PBW 2005) and SAP (PBW 2005) as requiring investigation, with tables prepared by PBW that identified the number of samples necessary to evaluate each source. A figure showing the PSAs shall be included in the NEDR.
2. An updated, as appropriate, version of the Conceptual Site Model(s) shall be included with the NEDR.
3. The preliminary screening values (PSVs) for total polycyclic aromatic hydrocarbons (PAHs) in sediment shall be included. Currently, PSVs for individual PAH compounds are listed in the draft NEDR. TCEQ (2006) also provides low and high molecular weight PAH benchmarks (marine only) and total PAH benchmarks. The benchmarks for total PAHs are the most relevant for evaluating risk to the benthic community because PAHs almost always occur in the environment as mixtures. Values for individual and low and high molecular weight (MW) PAHs are mostly provided as guidelines to aid in the determination of disproportionate concentrations of more toxic individual PAHs within the mixture (i.e., as represented by an exceedance of a second effects level) that may be masked by the concentration for total PAHs. The total PAH benchmarks are based on the thirteen parent PAH compounds listed in Table 3-3 of TCEQ (2006) guidance, meaning that when the person uses a total PAH benchmark for screening, it is appropriate to have a value for all thirteen PAHs included in the sum. This is accomplished by using proxy values for the analyzed but undetected PAHs, and adding them to the concentrations of the detected PAHs for comparison to the total benchmark. See TCEQ (2006), Section 3.5.4 Sediment Benchmarks for further detail.
4. It appears that several compounds (PAHs, metals, pesticides) exceed their sediment PSVs for benthic invertebrates and may warrant further ecological investigation. If so, bulk sediment toxicological testing and the development of a sediment toxicity work plan apply and should be reviewed as a part of the ecological risk assessment process.

SPECIFIC TECHNICAL REVIEW COMMENTS

1. **Sec. 2.3.3: Fish Tissue, p. 13:** Describe how the fish tissue was sampled (i.e., fillet or whole body).
2. **Appendix B:** The background concentration tolerance limit calculations were based on analyses performed by ProUCL. However, these model outputs and goodness of fit tests were not provided. These shall be included in this section.
3. **Appendix B:** The sample sizes are not included in the summary table. These shall be added to the table.